

CLAIMS

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1. ~~An adenosine-5'-diphosphate (ADP)-ribosylation inhibitor comprising proanthocyanidin as an effective ingredient.~~
2. An ADP-ribosylation inhibitor according to claim 1, wherein
5 proanthocyanidin is obtained from an edible plant or an edible plant-derived material.
3. An ADP-ribosylation inhibitor according to claim 2, wherein said edible plant or edible plant-derived material is an extract from an apple or a grape.
- 10 4. ~~An ADP-ribosylation inhibitor according to any one of claims 1 through 3, wherein proanthocyanidin is the one extracted with at least one solvent selected from water, an alcohol, an ester and a ketone.~~
5. An ADP-ribosylation inhibitor according to any one of
15 claims 1 through 4, wherein proanthocyanidin is the one purified using a styrene type adsorption resin, an anionic exchange resin, an octadecyl-chemically binding type silica gel, an octyl-chemically binding type silica gel, a phenyl-chemically binding type silica gel and a silica gel.
- 20 6. A composition for the treatment and/or prevention of diphtheria, pertussis, tetanus and opportunistic infection, comprising as an effective ingredient an ADP-ribosylation inhibitor according to any one of claims 1 through 5.
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7. ~~A composition for the treatment and/or prevention of enterotoxin type bacterial infectious disease comprising proanthocyanidin as an effective ingredient.~~
- 25 8. A composition for the treatment and/or prevention of enterotoxin type bacterial infectious disease according to claim 7, which is

for the treatment and/or prevention of cholera, botulinus and traveler's diarrhea.

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5 9. A composition for the treatment and/or prevention of enterotoxin type bacterial infectious disease according to claim 7 or 8, wherein said edible plant or edible plant-derived material is an extract from an apple or a grape.

10 10. A composition for the treatment and/or prevention of enterotoxin type bacterial infectious disease according to any one of claims 7 through 9, wherein proanthocyanidin is the one extracted with at least one solvent selected from water, an alcohol, an ester and a ketone.

15 11. A composition for the treatment and/or prevention of enterotoxin type bacterial infectious disease according to any one of claims 7 through 10, wherein proanthocyanidin is the one purified using a styrene type adsorption resin, an anionic exchange resin, an octadecyl-chemically binding type silica gel, an octyl-chemically binding type silica gel, a phenyl-chemical type binding silica gel and a silica gel.

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